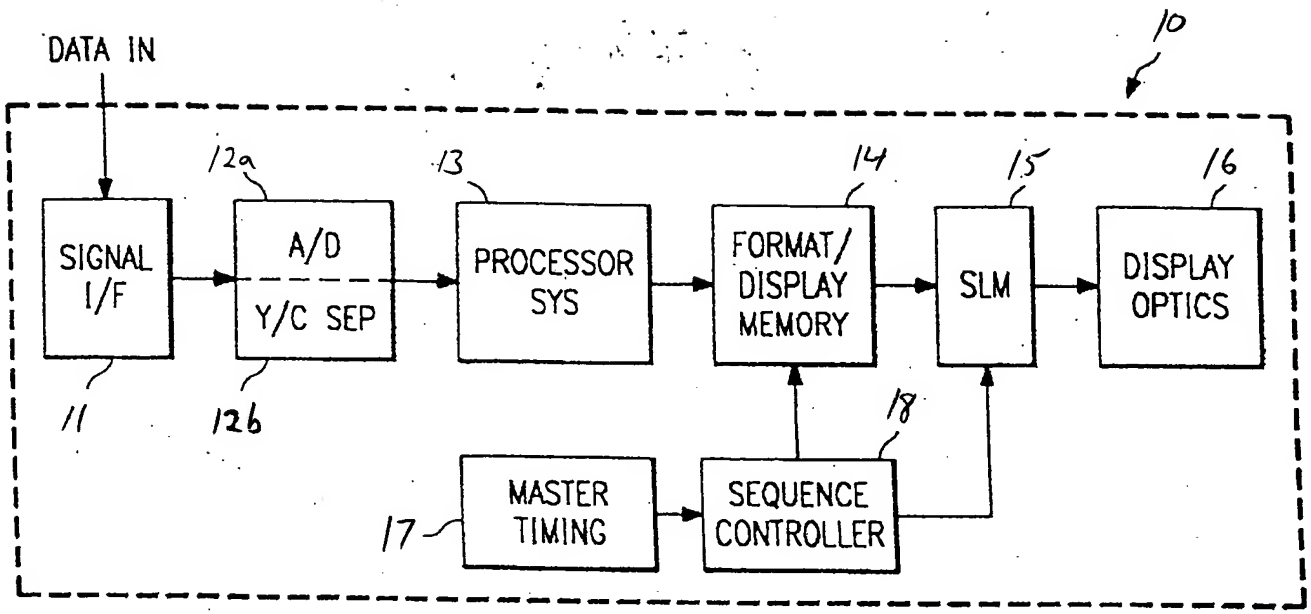


Fig. 1 Prior Art

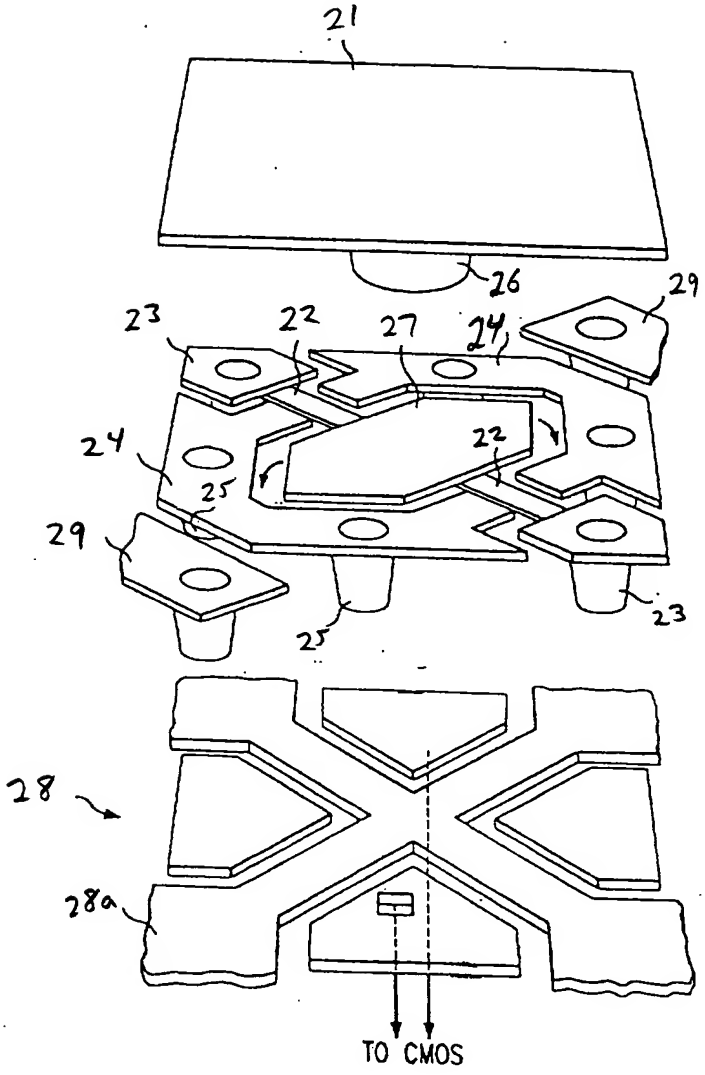


FIG. 2
PRIOR ART

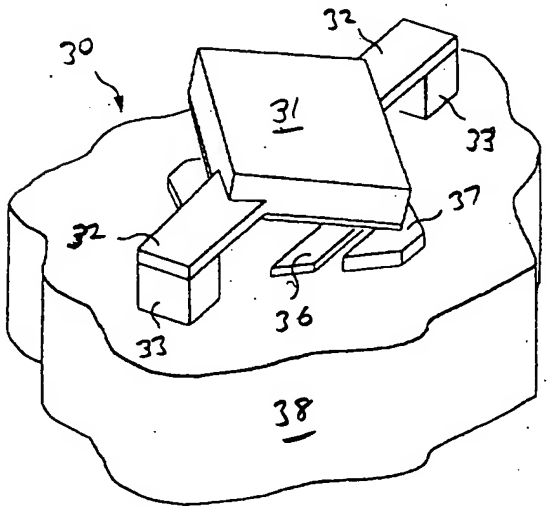


FIG. 3
PRIOR ART

Fig. 4a Prior Art

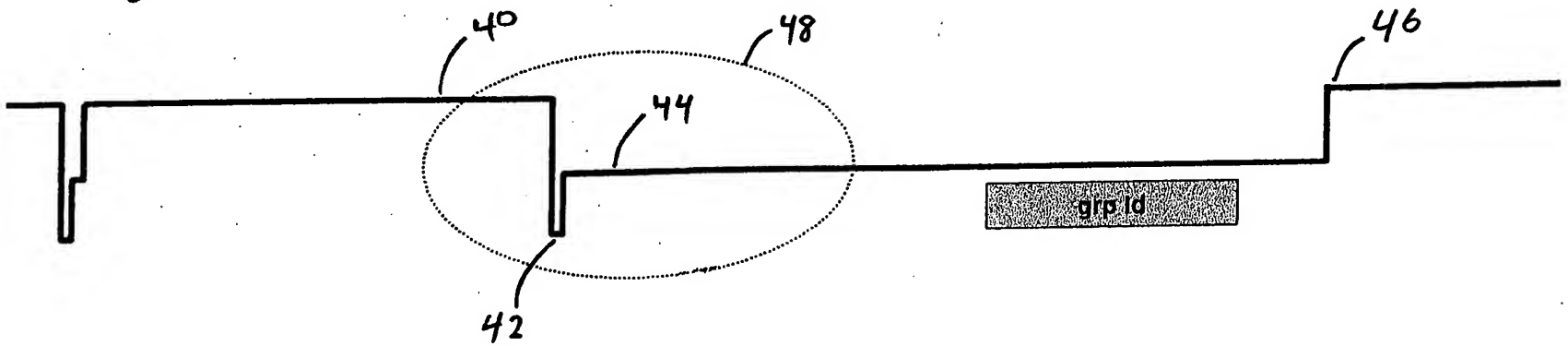


Fig 4b
Prior Art

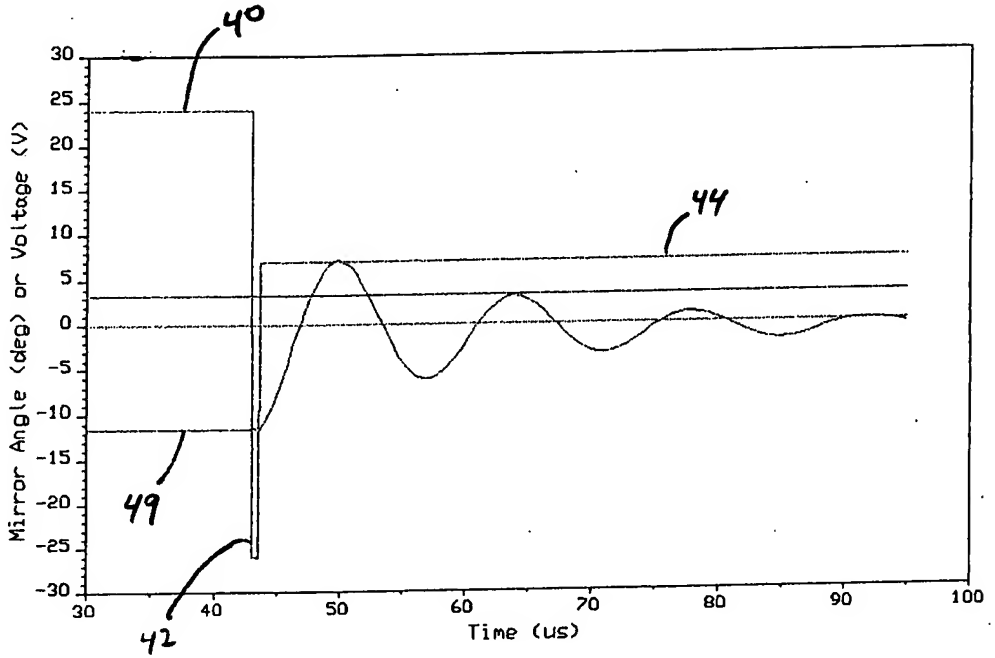
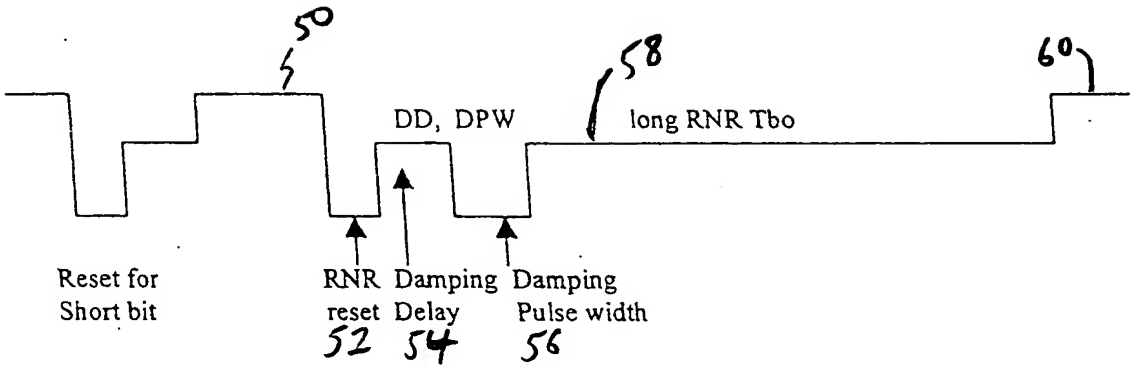


Fig. 5


50
58
60
DD, DPW
long RNR Tbo
Reset for
Short bit
RNR
reset
52
Damping
Delay
54
Damping
Pulse width
56

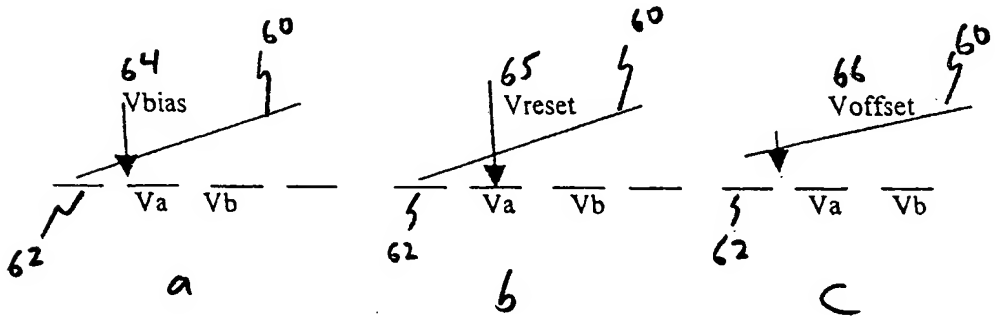
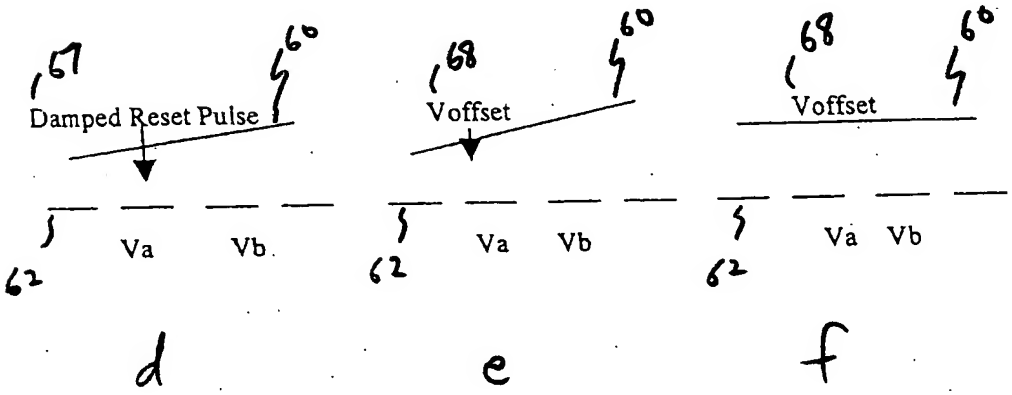

64
Vbias
60
Va
Vb
62
a
65
Vreset
60
Va
Vb
62
b
66
Voffset
60
Va
Vb
62
c

Fig. 6


67
Damped Reset Pulse
60
Va
Vb
62
d
68
Voffset
60
Va
Vb
62
e
68
Voffset
60
Va
Vb
62
f

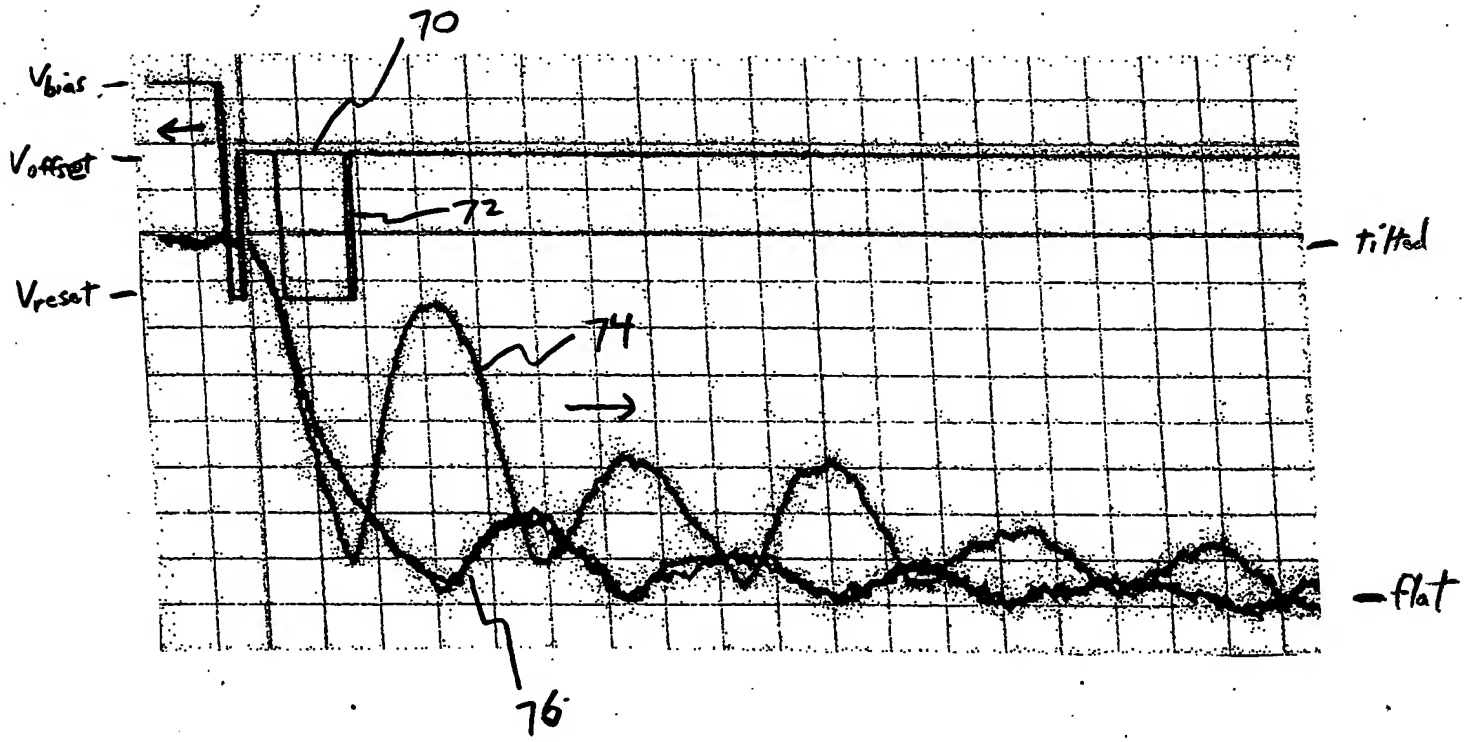


Fig. 7

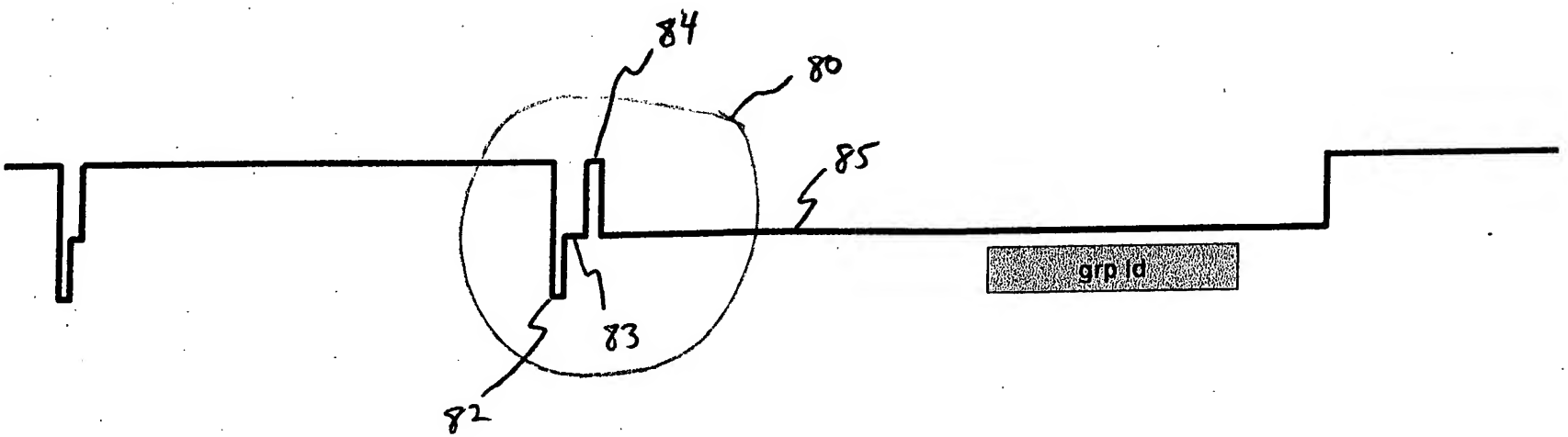


Fig. 8a

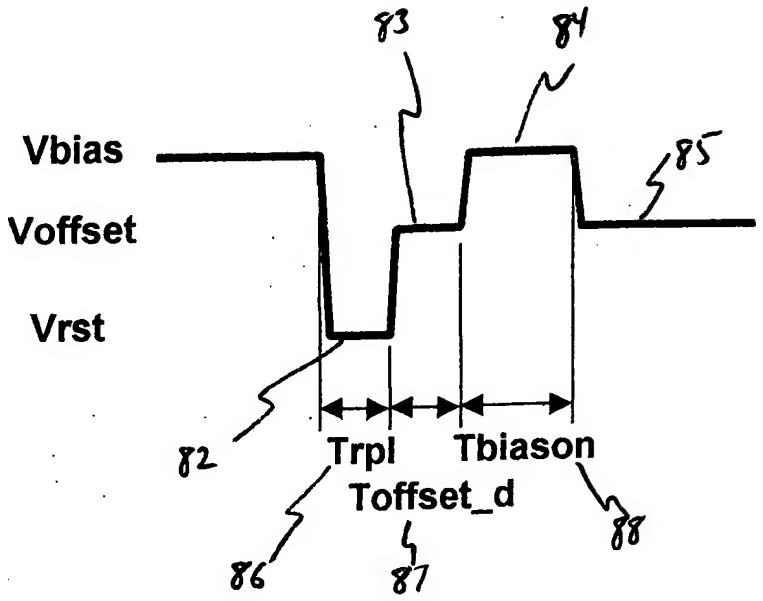
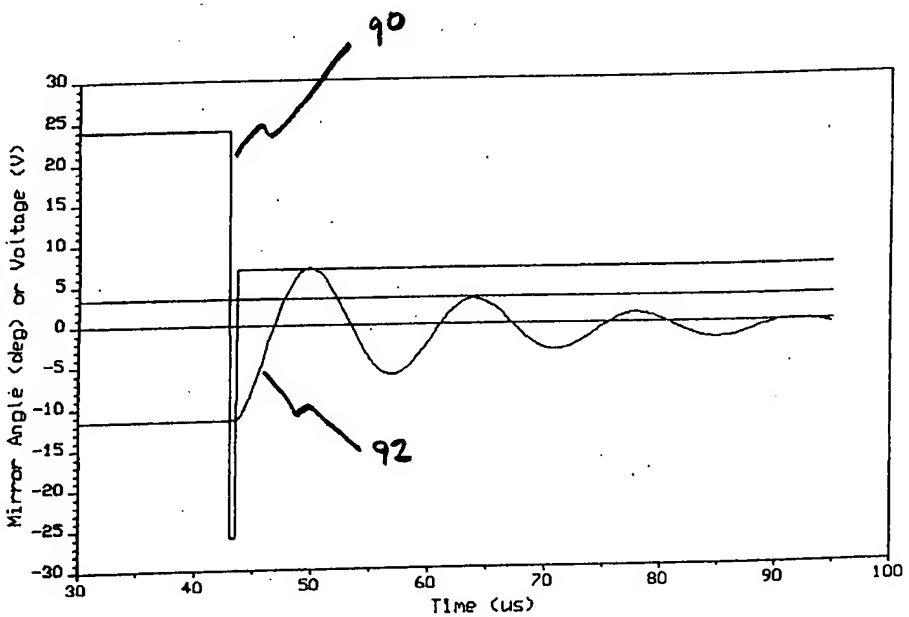


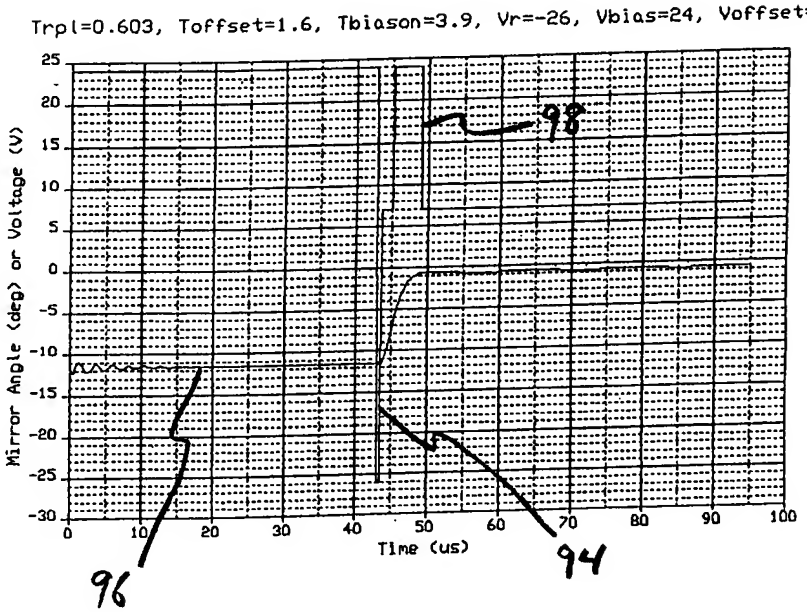
Fig. 8b

Damped-release vs. Reset-release model



Reset-release

Fig. 9a



Damped-release

Fig. 9b

Current Reset-and-release, black video content

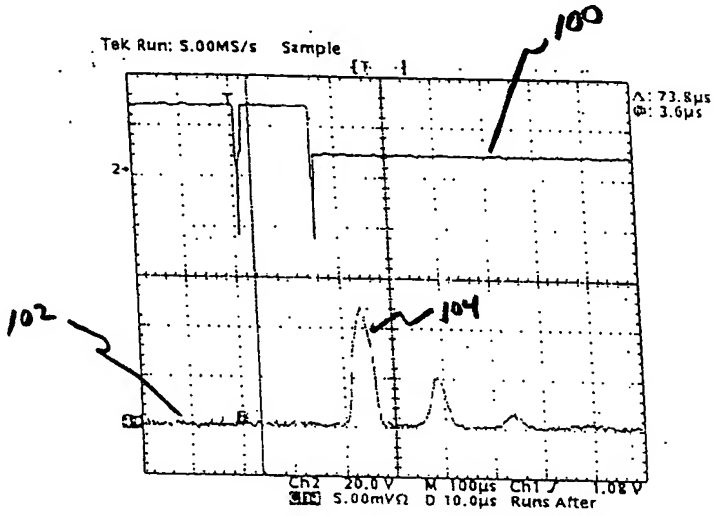


Fig. 10a

Damped-release, black video content

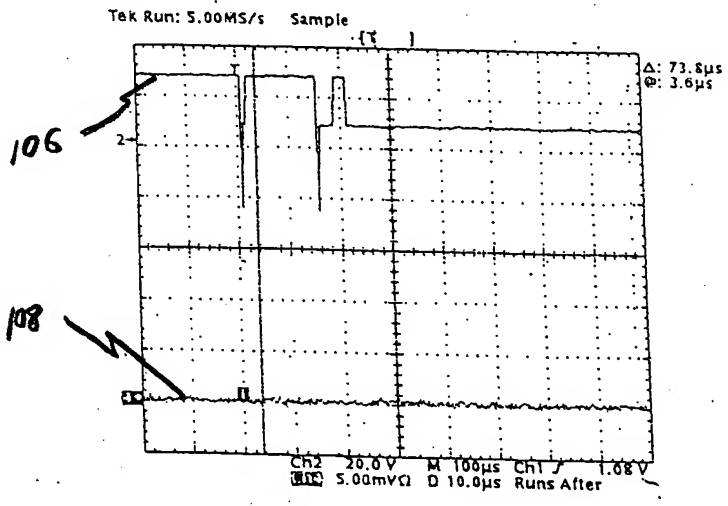


Fig. 10b

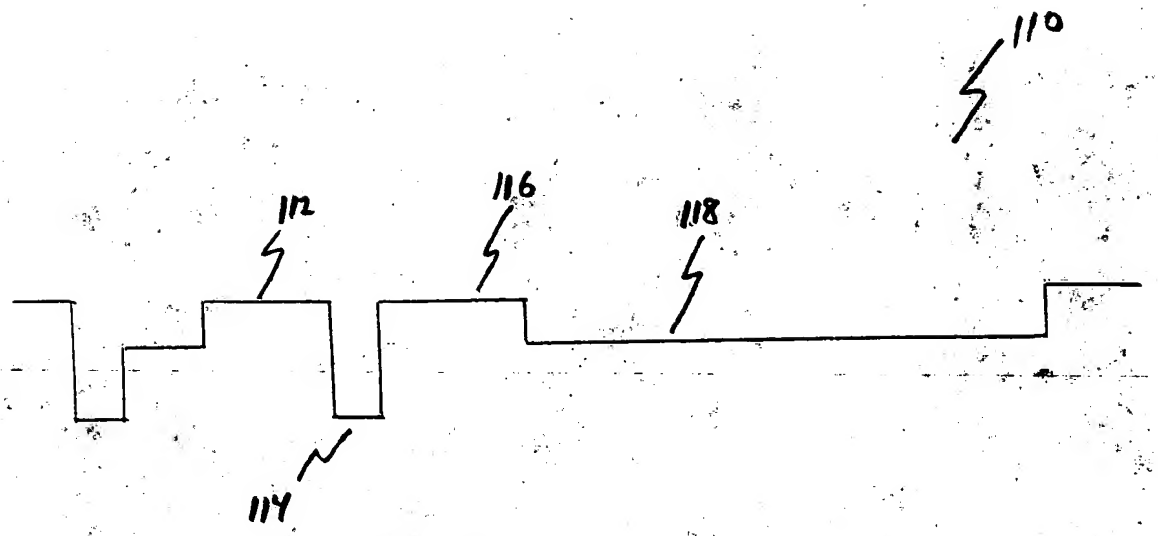


Fig. 11

Fig. 12a

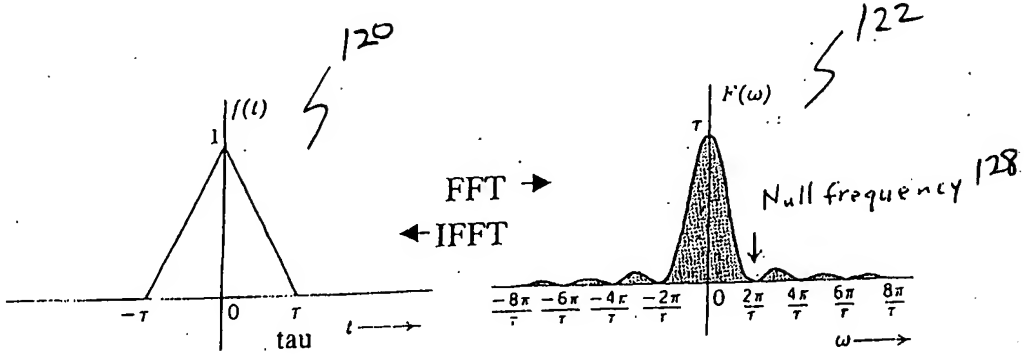


Fig. 12b

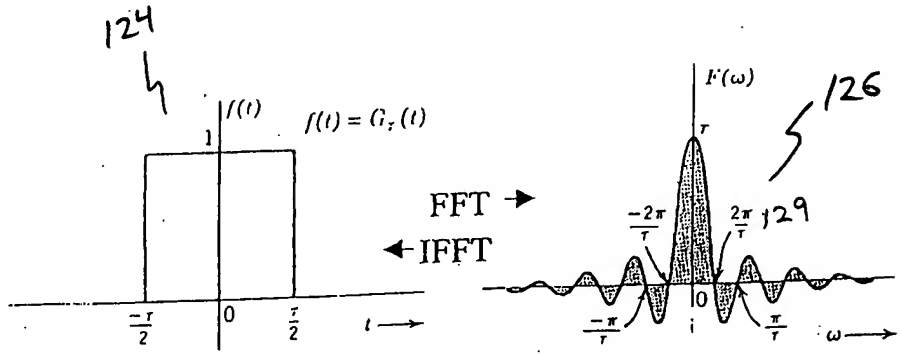


Fig. 13a

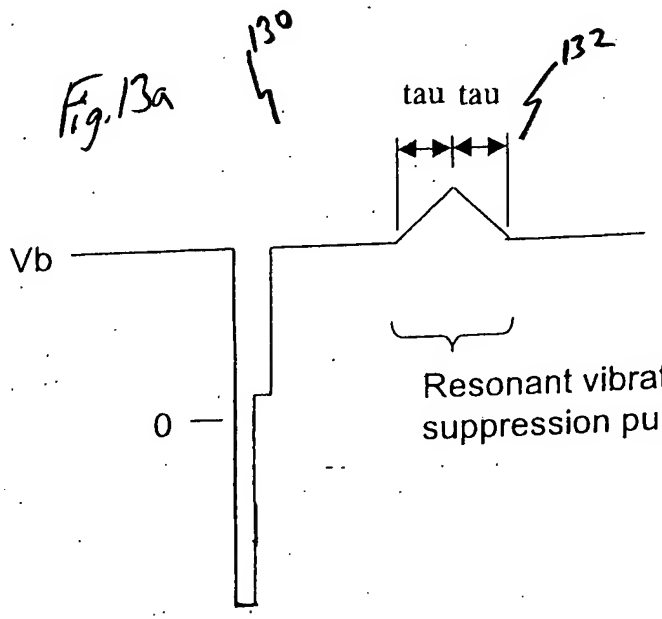


Fig. 13b

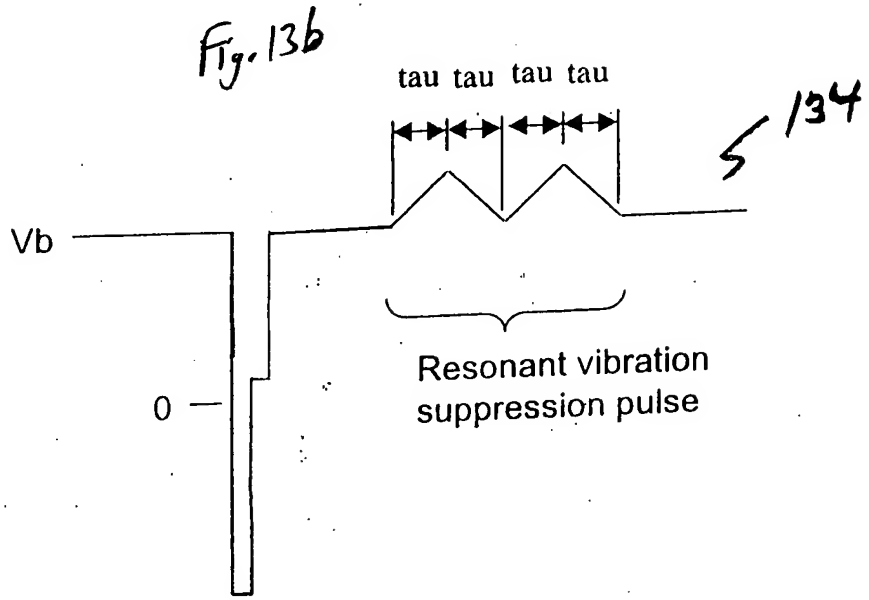


Fig. 14

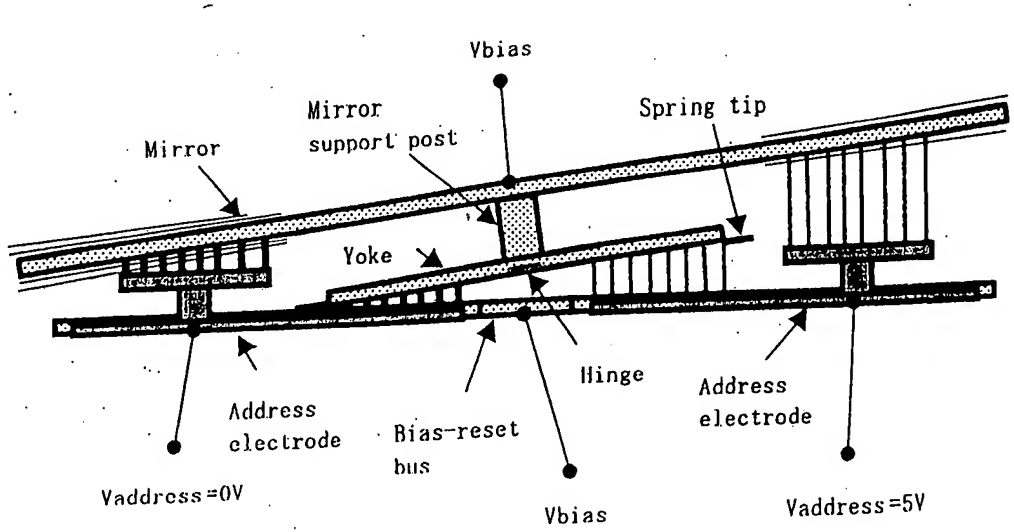
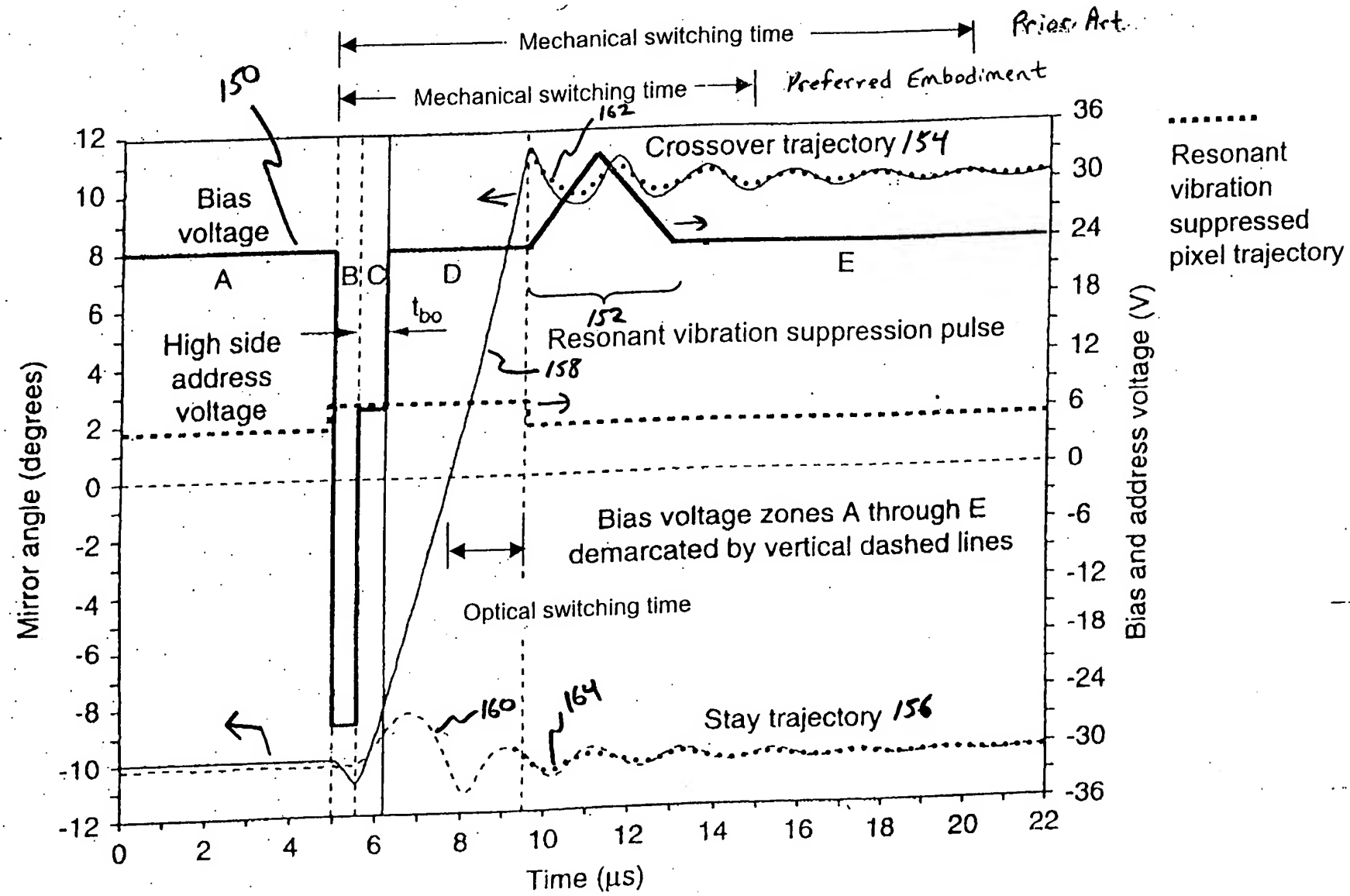


Fig. 15


Mechanical switching time
Prior Art
Mechanical switching time
Preferred Embodiment
150
162
Crossover trajectory 154
Bias voltage
A
B
C
D
E
t_{bo}
152
Resonant vibration suppression pulse
High side address voltage
158
Bias voltage zones A through E demarcated by vertical dashed lines
Optical switching time
160
164
Stay trajectory 156
Mirror angle (degrees)
Bias and address voltage (V)
Time (μs)
Resonant vibration suppressed pixel trajectory